

**ABSTRACT**

Method and apparatus for applying a thermal  
conductive medium (TCM) to the inside of a disposable  
5 sheath. A uniform amount of TCM is applied in an  
automated manner to the conductive portion of a  
disposable sheath to increase conductivity. Application  
is by way of a rotating tip having a plurality of nozzles  
through which TCM is pumped under control of a timing  
10 circuit. The duration of TCM application and the  
rotation of the tip is carefully controlled to insure  
uniform application of a precise amount of TCM. TCM  
application is avoided at portions of the sheath where  
thermal conductivity is not desired and at the tip of the  
15 sheath which will be coated by TCM as a result of probe  
insertion into the sheath. By automating the TCM  
application process, TCM can be applied in precise  
amounts and in a uniform manner without accidentally  
coating areas of the sheath where TCM is not desired. In  
20 addition the process can be conducted in far less time  
than is required to manually apply TCM.